

P.O. Box 200901 · Helena, MT 59620-0901 · (406) 444-2544 · w

May 20, 2005

#### Ladies and Gentlemen:

To comply with the Administrative Rules of Montana, 17.4.607(2) and 17.4.609(2), the Department of Environmental Quality prepared the enclosed Environmental Assessment (EA). The EA is for the proposed construction and operation of the City of Bozeman Transfer Station. The new facility would be built on approximately 10 acres of an approximately 86-acre parcel of city owned land. The site is south of Red Wing Drive, north of Mandeville Drive, east of Interstate 90 and west of North Seventh Avenue, approximately one-half mile northwest of the Interstate 90-North Seventh Avenue intersection. The land is in the NW ¼ of Section 36, T. 1 S, R, 5 E., Gallatin County Montana.

The purpose of the EA is to inform all interested governmental agencies, public groups, and individuals of the proposed action and to determine whether or not the action may have a significant effect on human health and the environment. The Department will not make a licensing decision until at least thirty (30) days after publication of the EA.

If you wish to comment on this proposed action, please do so in writing, or on the Internet at wutmbcomments@mt.gov, within the allotted time.

The Department will host a public meeting to provide information and answer questions about the proposal. The meeting will be in the Commission Chambers of the Bozeman City Hall, 411 East Main St, Bozeman, MT, June 8, 2005 from 7 p.m. to 9 p.m. Please contact Mark Kottwitz at (406) 586-3258 regarding design documents.

If you have any questions or need additional information, please contact me at the Permitting and Compliance Division, Waste and Underground Tank Management Bureau, Solid Waste Section, (406) 444-9879 or e-mail mdasilva@mt.gov.

Sincerely,

Mike DaSilva Solid Waste Section

Enclosure



**Brian Schweitzer, Governor** 

Helena, MT 59620-0901 · (406) 444-2544

## City of Bozeman Class II Transfer Station Mailing List

City of Bozeman, 20 E. Olive, P.O. Box 1230, Bozeman, MT 59771-1230 Gallatin County Health Officer, 12 North Third, Bozeman, MT 59715 SCS Engineers, Allied Engineering Services, Inc., 32 Discovery Drive, Bozeman, MT 59718

Gallatin County Commissioners, 311 W Main Street, Bozeman, MT 59715-4576

Rick Rieck, Staubach Company, 4105 Lexington Avenue North, Ste 200, Arden Hills, MN 55126

Joe Gentry, Washington Corporation, PO Box 16630, Missoula, MT 59808 Gavin Anderson, Forest and Lands Resource Specialist, State Central Land Office, 8001 North Montana Ave, Helena, MT 59620-9388

Larry and Joanie Peterson, 27383 Frontage Road, Bozeman, MT 59718

Anita Saunders, 27477 Frontage Road, Bozeman, MT 59718

Carolyn Rogers, 1523 Manley Road, Bozeman, MT 59718

Thomas and Victoria Tillo, 233 Sherry Lane, Kalispell, MT 59901

Katie Whitman, 720 Birch Point Dr., Whitefish, MT 59937

Jane Campbell, 144 Brookside Dr., Idaho Falls, ID 83404

Carol Potera, 1108 Adobe Drive, Great Falls, MT 59404

Kelli Wood, 918 Woodland Drive, Bozeman, MT 59718

Claudia Foster, 626 Old Farm Rd., Bozeman, MT 59718

Sam Rogers, 1323 Manley Rd., Bozeman, MT 59718

Greg Krack, 27459 Frontage Road, Bozeman, MT 59718

Jim Burns, 27737 Frontage Road, Bozeman, MT 59718

Ron and Laurie Woody, 27589 Frontage Road, Bozeman, MT 59718

Mountain Rain LLC, P.O. Box 1665, Bozeman, MT 59771

Murdock's Family Limited Partnership, 2275 N. 7th Ave., Bozeman, MT 59715

Greenwood Step Connection, Inc., P.O. Box 10085, Bozeman, MT 59719

Greenbrier Hotel Enterprises, LLC, P.O. Box 8655, Missoula, MT 59807

T.M.H Enterprises, Inc, 810 Mandeville Land, Apt 4, Bozeman, MT 59715

Harold Krislock, 2615 Fairway Dr., Bozeman, MT 59715

Mark R. Albrecht, 4969 Durston Rd., Bozeman, MT 59718

Reeves Road Partners, 6400 Bostwick Dr., Bozeman, MT 59715

Hance Susan Taylor revocable Trust, 1640 Reeves Rd., Bozeman, MT 59718

Pamela and John Abernathy, P.O Box 340, Franconia, NH 03580

Aniko and Jacob Nelson, 1640 Reeves Rd., Bozeman, MT 59718

Rhonda Reed, 27489 Frontage Rd, Bozeman, MT 59715



Brian Schweitzer, Governor

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Orah H. McNeal, 27655 Frontage Rd., Bozeman, MT 59715 Dennis Wheat, 817 Wheat Drive, Bozeman, MT 59715

3200, Helena, MT 59626

U.S. Army Corps of Engineers, Jean Ramer, 10 W. 15th St., Suite 2200 Helena, MT 59626

Director, Department of, Fish, Wildlife & Parks, 1420 E 6th Avenue, Helena, MT 59620 Tom Ellerhoff, DEQ, Director's Office, Helena, MT 59620 Jeff Ryan, DEQ, Water Protection Bureau, Helena, MT 59620 Environmental Quality Council, Capitol Complex, Helena, MT 59620 Documents Section, State Library, Capitol Complex, Helena, MT 59620 State Historic Preservation Office, 225 N. Roberts, Helena, MT 59620 Montana Natural Heritage Program, P.O. Box 201800, Helena, MT 59620-1800 Stephanie L. Wallace, U.S. EPA, Region 8, Montana Office, 10 West 15th Street, Suite





O. Box 200901 · Helena, MT 59620-0901 ·

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www.deq.mt.go

## PUBLIC NOTICE

The Montana Department of Environmental Quality, Permitting and Compliance Division, Waste Management Section received an application to license a transfer station. The Department reviewed the application and determined it is complete. The name and address of the applicant is:

City of Bozeman, 20 E. Olive, P.O. Box 1230, Bozeman, MT 59771-1230

The application is for the proposed construction and operation of the City of Bozeman Transfer Station. The new facility would be built on approximately 10 acres of an approximately 86-acre parcel of city owned land. The site is south of Red Wing Drive, north of Mandeville Drive, east of Interstate 90 and west of North Seventh Avenue, approximately one-half mile northwest of the Interstate 90-North Seventh Avenue intersection. The land is in the NW ¼ of Section 36, T. 1 S, R, 5 E., Gallatin County Montana.

This notice is to inform the public of the proposed action and to seek public participation in the decision-making process. To comply with the Administrative Rules of Montana, Sections 17.4.607(2) and 17.4.609(2), an Environmental Assessment has been prepared and is available upon request from the Waste and Underground Tank Management Bureau, Waste Management Section, P.O. Box 200901, Helena, MT 59620-0901, and on the Department Web site at http://www.deq.state.mt.us/ea/wastemgt.asp. There will be a thirty (30) day comment period from the date of this notice for the public to submit written comments concerning the proposed facility. Comments may also be e-mailed, to wutmbcomments@mt.gov.

The Department will host a public meeting to provide information and answer questions about the proposal. The meeting will be in the Commission Chambers of the Bozeman City Hall, 411 East Main St, Bozeman, MT, June 8, 2005 from 7 p.m. to 9 p.m. Please contact Mark Kottwitz at (406) 586-3258 regarding design documents. Persons with disabilities who need reasonable accommodations in order to participate in these meetings should contact Lisa Peterson at 444-2929.

Dated this 20<sup>th</sup> day of May 2005.



Brian Schweitzer, Governor

O. Box 200901 · Helena, MT 59620-0901

• (406) 444-2544

www.deq.mt.go

DEPARTMENT OF ENVIRONMENTAL QUALITY
Permitting and Compliance Division
Solid Waste Program
P.O. Box 200901
1620 E. Sixth Avenue
Helena, MT 59620-0901

## **ENVIRONMENTAL ASSESSMENT (EA)**

#### **Division/Bureau:**

Permitting and Compliance Division, Waste and Underground Tank Management Bureau, Solid Waste Section

## **Project or Application:**

The City of Bozeman submitted an application to the Montana Department of Environmental Quality (Department) to construct a Class II municipal solid waste transfer station to accept over 10,000 tons of waste per year, to replace its Class II landfill that is nearing capacity. The new facility would be set up to collect municipal solid waste that would be loaded into transfer trailers and hauled by truck to the Logan Class II landfill operated by Gallatin County.

## **Description of Project:**

<u>Proposed Transfer Station</u> — The new facility would be built on approximately 10 acres of an approximately 86-acre parcel of city owned land. The site is south of Red Wing Drive, north of Mandeville Drive, east of Interstate 90 and west of North Seventh Avenue, approximately one-half mile northwest of the Interstate 90-North Seventh Avenue intersection (See Figure 1). The land is in the NW ¼ of Section 36, T 1 S, R 5 E, Gallatin County Montana. The parcel has been zoned industrial for at least the past 21 years.

A new road, approximately 2,900-feet long, would be built from the intersection of Wheat Drive and Mandeville Lane to the site. Minor improvements would be made to the Mandeville Lane–North Seventh Avenue intersection to facilitate turning movements for the trucks pulling the 53-foot transfer trailers. The improvements would consist of the addition of a traffic stop bar at the appropriate location, the addition of a "no turn on red" sign, and additional paving at the southwest corner of the intersection.

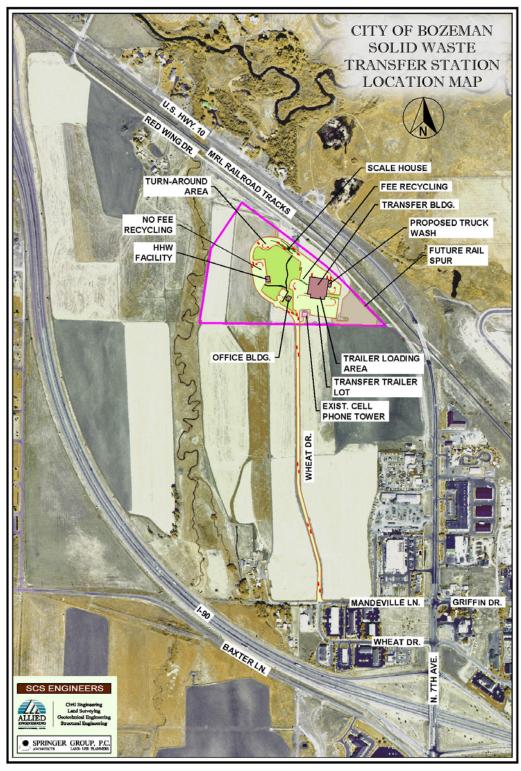


Figure 1, Transfer Station Location Map

The 2006 average daily traffic to the transfer station is expected to be 178 vehicles. The maximum number of vehicles in an hour is expected to be 44. This is based on the number of vehicles going to the current landfill. This amounts to a 1.2 percent increase in traffic on North Seventh Avenue. Assuming that the general traffic on North Seventh Avenue and the traffic to the transfer station would grow at approximately the same rate, the overall impact to traffic on North Seventh Avenue would remain the same for the life of the facility.

<u>Site Topography</u> — The proposed location of the transfer station is currently relatively flat, slightly sloped farmland. The same family farmed the property for over 100 years until it was sold to the city. The western one-third of the site, a relatively flat area, gently slopes in a north/northeast direction at grades between 1.5 and 2.0 percent and ranges in elevation from 4680 to 4695 feet above sea level. The eastern two-thirds of the area is a hillside that dips toward the west/northwest at grades between 3.0 and 8.0 percent and varies in elevation from 4685 to 4715 feet above sea level. A drainage swale runs in a northwesterly direction at the base of the hillside. Western Wireless leases about 2,500 square feet of the parcel where they constructed a cellular tower and support building, security fence and landscaping, which would all remain in place.

<u>Transfer Station Features</u> — The 42,000 square foot main transfer station building would be the dominant feature of the site. In addition there would be a scale house with two scales, an office building, a household hazardous waste (HHW) collection area, a reusable items distribution area, a fee recycling area and a no-fee recycling area (See Figure 1). There would be no processing (i.e. baling, grinding, crushing, composting) of recycled items on the site.

Leachate Control — Any water that flows through or contacts municipal solid waste would be leachate and would not be mixed with storm water. The transfer station building would be the only part of the facility that would regularly be in contact with municipal solid waste. Leachate could be generated in the building from wet trash or from snow, ice or rain carried in on the vehicles dumping waste. The building would have a system of floor drains and sumps to collect any water that came in contact with waste. The sumps and floor drains would discharge to an underground tank and then to a city sewer line. The collection areas outside of the building would be sloped or have sumps so that any liquids from them would not mix with storm water.

Detention Ponds and Drainage Control — Perimeter diversions would route surface water, coming from upgradient areas, around the facility to the natural drainage way. All stormwater runoff from within the facility would be routed to a stormwater retention basin. The basin outlet would consist of infiltration chambers that would allow the water to seep into the ground. The pond would be designed to capture all sediment and runoff from the active area from a post-development 25-year peak runoff event.

Because the construction activity would disturb an area larger than one acre, the city would obtain coverage from the Department under the General Permit for Storm Water Discharges Associated with Construction Activity.

If the facility ever needed to discharge to surface waters, storm-water discharge permits from the Department could be required. Prior to obtaining a stormwater discharge permit; samples would have to be taken to assure that the discharge would meet the requirements of the Montana Pollution Elimination Discharge System. Sampling would have to be done prior to any discharge or if there was an unplanned discharge, during the discharge.

Other Disposal Areas & Temporary Storage Areas — The plans call for a household hazardous waste (HHW) collection area where household quantities of hazardous waste would be stored until they could be transported off the site to an appropriate disposal facility. The HHW area would consist of three roofed, fire-rated, non-combustible, code compliant storage containers, open to the air and surrounded by a six-foot chain link fence. Each container would have a sloped sump to contain any spills. The containers would be approximately 24 feet long, eight feet wide and nine feet tall. No hazardous waste would be stored on the site for more than 90 days.

There would initially be two recycling areas. A no-fee recycling area next to the HHW collection area and a fee recycling area on the west side of the transfer station building (See figure 1). The no-fee recycle material likely would include aluminum cans, tinned cans, recyclable plastic, clear and colored glass, corrugated cardboard, magazines, newspapers, mixed waste paper, office paper, antifreeze, and waste motor oil. The no-fee recycling area would be located near the entrance to the site, and could be accessed without crossing the scales. The area would contain a variety of side-load and roll-off containers, each prominently labeled to guide customers in sorting and depositing recyclables. There would also be space for a reusable item area in the future.

The fee recycling area would house a variety of containers, bunkers and tanks for the collection of recyclables such as wood mulch, waste oil, antifreeze, ferrous and nonferrous scrap metal, vehicle batteries, white goods, yard waste, cattle manure, and sawdust. An aspect of this area that differs from the no–fee recycling area would be an eight-foot tall retaining wall that would allow for the top loading of six, 40 cubic yard containers. The containers would sit on concrete slabs at the base of the wall

The transfer trailer lot, with space for 18 trailers, would be south of the transfer building. The empty trailers would be parked there until they were pulled into the building to be filled. The covered, full trailers would also be parked there for no more than 24 hours until they were taken to the landfill. However, in emergency cases some MSW could remain on site until the next day, either in the transfer building or in covered transfer trailers in the transfer trailer parking area. There would be a truck wash station on the east side of the main building (See Figure 1).

Gate House & Equipment Storage Buildings — The plans call for an office building and parking lot and a scale house to weigh incoming and out going vehicles (See figure 1).

### Operation and Maintenance Plan

Personnel — The City of Bozeman would be responsible for administration of the transfer station. Operations at the facility would follow the proposed O&M Plan for waste acceptance and screening, disposal, leachate management and storm-water control. The Department would inspect the facility on a regular basis to ensure compliance with the approved procedures.

Seven full time employees would man the facility. All incoming loads would be weighed. The employees would operate the equipment, direct customers to the proper disposal areas, and maintain all roads and facility structures.

Operating Hours — The transfer station would be open from 8:00 a.m. to 4:30 p.m. Monday through Friday and 8:00 a.m. to 3:30 p.m. on Saturday. The facility would be closed on Sundays and the following holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving and Christmas. Hours of operation would be listed on a sign at the entrance. Days and hours of operation could change in the future, subject to public demand.

Acceptable Wastes — Signs at the facility would list the acceptable wastes. The facility would be designed for a peak capacity of 500 tons of municipal solid waste per day with an expected average volume of 340 tons per day of Groups II, III, and IV waste from the Bozeman area. Group II wastes include decomposable wastes and mixed solid wastes containing decomposable materials, but exclude regulated hazardous waste. Group III wastes include wood wastes and non-water soluble solids. This includes, but is not limited to, brick, rock, dirt and concrete, wood materials, and tires. Group IV wastes include construction and demolition debris.

Unacceptable wastes would be waste containing bulk or non-containerized liquids, sewage sludge and/or septage, waste regulated as radioactive, waste containing polychlorinated biphenyls (PCBs) or PCB contaminated materials, large volumes of bulky construction, demolition, and land-clearing waste, burn barrels, dirt, street sweepings and concrete and asphalt.

Special and Hazardous Wastes — The HHW collection would be limited to the disposal of household or small quantity generator hazardous waste. The area would have up to three pre-fabricated, roofed, storage containers open to the air and surrounded by a six-foot chain link fence. The dimensions of the containers would be approximately 24 feet long, eight feet wide, and nine feet tall. The containers would be fire-rated, non-combustible, and code-compliant. The area would be designed with a spill containment reservoir to capture accidental spills. The facility would operate on an appointment only basis and there would be a 90-day storage limit for any hazardous waste disposed of in the containers.

Site workers would implement a waste screening program, conducting random load inspections to assure compliance with rules regarding hazardous waste, hot loads, liquid

wastes or other prohibited materials. If unacceptable or hazardous wastes were found the customer would be instructed to remove the material and dispose of it at an appropriate facility. Hot loads, those smoking or on fire, would be extinguished outside the building and unloaded away from other waste to assure the fire was out.

Daily Transfer Station Operations — After waste was unloaded (tipped) onto the floor in the enclosed customer unloading area, a rubber tired front end loader would push the waste across the customer unloading floor (tipping floor) to an opening in the floor. The waste would fall into the top of a transfer trailer where it would be compacted with a knuckle boom crane. This compaction method could result in 20 to 25 tons of waste in each transfer trailer, provided the maximum sized vehicle is used.

Filling of transfer trailers would be monitored by staff based on a weight display on the wall above the tipping floor. Once full, the transfer trailer would be covered and moved to the transfer trailer parking area to be prepared for hauling to the disposal site, and the next transfer trailer would be moved in.

Up to eighteen empty or loaded transfer trailers could be temporarily stored in the trailer parking area south of the building. Barring emergencies, full trailers would not be kept in the storage area for more than 24 hours.

The tipping floor would be cleaned with a mechanical street sweeper. The transfer station floor and tunnel system would be washed down as needed. One to one-and-a-half-inch wash-down hoses located in the building would be used for wash-down. The wash-down water would enter the floor drains and flow to the sump and to the city sewer line.

The adjoining road system and container sites would also be cleaned using a mechanical street sweeper, weather permitting. Vegetated areas would be moved on a regular basis.

Workers would weigh incoming loads, direct the placement of waste on the tipping floor, place and compact waste in the transfer trailers, and move trailers in and out of the building. They would maintain stormwater controls, access roads, and the materials handling areas. The facility would be able to accommodate the simultaneous tipping of 18 customer vehicles. Customer queues should not exceed 30 minutes for self—haul customers, or 10 minutes for commercial customers. The customer unloading area would be designed with surge capacity, and would hold approximately one—half peak day of waste if the waste transport system had an unanticipated shutdown.

Litter and Access Control — There should be few problems with litter because waste would be dumped inside the transfer building and the building doors would be oriented away from the prevailing wind direction. There would be an eight-foot chain link fence with three access gates around the perimeter of the site. The entrance gate would be attended during operating hours and locked when the site is closed. The fence around the site would catch any windblown litter that escaped from the transfer building. Rules governing customer use of the facility would include a requirement that any loads with

loose materials be covered as they arrive to avoid scattering litter. Customers arriving with loads that should have been covered but were not would be warned for a first infraction and charged a surcharge for subsequent infractions. Workers would regularly patrol the area and access road to gather litter that is not caught by the fences.

Operators would be on duty whenever the site is open to the public. The gate would be locked when the facility is closed. Signs throughout the facility would direct people to the appropriate area for the type of waste they have. Signs would inform the public of fees and unacceptable wastes.

Severe Weather Operation — Since the dumping area would be inside a building, severe weather would pose few problems. Excess moisture from rain or snow on vehicles would be collected by the floor drains and routed to the sump and city sewer line. The floor would be heated to facilitate cold weather operation and leachate collection.

Contingency Planning — The plan of operations has contingency plans for unusual situations. Any customer vehicles that contain burning materials would be directed to the customer vehicle maneuvering area outside the transfer building where the fire would be extinguished. The workers would saturate the load with water until it was confirmed that no burning material remained in the container. The extinguished load would then be moved into the transfer building where the load could be safely dumped and the contents spread out to allow for confirmation that all burning material had been extinguished. Any wastewater resulting from the procedure outside of the transfer building would be cleaned up using absorbents and disposed of properly.

Any non-acceptable wastes not sent back with the customer would be set aside until a specialist firm dealing in the handling of that type of waste could be contacted to come in and remove the material. In the event of any hazardous waste spills or leaks, or leaks from the full waste trailers the area would be isolated and absorbents would be used to prevent the released substance from entering the surface water runoff collection system. Spill response kits would be located in the transfer building.

The Bozeman Fire Department would be able to respond to all fire and medical emergencies at the site. Site employees would be trained to provide appropriate fire-fighting response on–site in advance of Fire Department arrival. All areas of the facility would be within 300 feet of a fire hydrant. The administration building, transfer building, recycling area, and equipment would be equipped with suitable fire extinguishers for controlling minor fires.

## **Benefits and Purpose of Proposal:**

Because the current landfill is nearing capacity and will be closed within approximately one year, the City of Bozeman must determine how to continue to provide cost effective solid-waste disposal for Bozeman residents. The City could find and license another site, or have everyone take their waste to the county landfill at Logan. Locating, studying and licensing a site for a new landfill is a costly process. In addition there are a number of

costly requirements relating to post-closure care for landfills. Typically, a Class II landfill site must be monitored for 30 years after it is closed. With any landfill, remedial action could be necessary to repair the final cover and monitor and clean up any groundwater contamination. Transfer stations do not bear these types of costs.

The proposed transfer station, which could operate indefinitely, is close enough to town to keep hauling costs down, but not close enough to residential areas to generate complaints that could arise from a transfer station operation. It has been estimated that operating a transfer station rather than having all Bozeman residents use the county facility at Logan would save nearly 155,000 round trips from Bozeman to Logan every year.

# Description and analysis of reasonable alternatives whenever alternatives are reasonably available and prudent to consider.

The Department considered two alternatives in the preparation of this EA:

- I. Approve the transfer station license application as proposed by the applicant. This would provide a long-term option for the disposal of solid waste for the Bozeman area.
- II. Not approve the license for the transfer station the "no action alternative". If this alternative were chosen, the applicant would have to either:
  - 1. Have the packer trucks and citizens take all waste to the Logan Landfill themselves, or,
  - 2. Spend a large amount of time and money to locate, study and license another site suitable for a Class II landfill in the Bozeman area.

# A listing and appropriate evaluation of mitigation, stipulations and other controls enforceable by the agency or another government agency.

The proposed transfer station must meet the minimum requirements of the Montana Solid Waste Management Act and administrative rules regulating solid waste disposal. In addition, the facility must comply with Air and Water Quality Acts and associated administrative rules as well as city and county ordinances. Obtaining the necessary approvals and remaining in compliance with these laws and regulations should minimize any adverse environmental effects.

The facility would have to operate under the guidelines in the approved Operations and Maintenance Plan, would only accept Group II, III, and IV wastes; not accept bulk liquids; and have all future design and operations changes receive prior approval from the Department.

**Recommendation:** 

The Montana Department of Environmental Quality is requesting input from the public

regarding this proposal.

If there are no adverse public comments identifying environmental problems or significant impacts that have not been addressed in the EA, the Department intends to

issue a license for construction and operation of the transfer station as proposed by the

applicant.

If an EIS is needed, and if appropriate, explain the reasons for preparing the EA:

The Department finds that an Environmental Impact Statement is not needed.

If an EIS is not required, explain why the EA is an appropriate level of analysis:

The Department finds that construction and operation of the proposed Bozeman solid waste transfer station would not significantly affect the quality of the human environment. Potential impacts to surface water resources, terrestrial and aquatic life,

vegetation and other aspects of the physical and human environment are expected to be minor. Potential impacts to the ground water and surface water resources would be minimal. An Environmental Assessment is an adequate document to address potential

impacts of the proposed Transfer station.

Other groups or agencies contacted or which may have overlapping jurisdiction:

Gallatin County

Montana Natural Heritage Program

Montana Historical Society

**Individuals or groups contributing to this EA:** 

SCS Engineers, Allied Engineering Services, Inc., Bozeman, MT

City of Bozeman Public Works Department

EA prepared by:

Mike DaSilva, Permitting and Compliance Division, Waste and Underground Tank

Management Bureau, Solid Waste Program

**Date:** May 20, 2005

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# **Potential Impacts on the Physical Environment**

	LEVEL OF IMPACT								
RESOURCE	Major	Moderate	Minor	None	Unknown	Appendix			
1. Terrestrial and Aquatic Life and Habitat			X			X			
2. Water Quality, Quantity, and Distribution			X			X			
3. Geology and Soil Quality, Stability and Moisture			X			X			
4. Vegetation Cover, Quantity and Quality			X			X			
5. Aesthetics			X			X			
6. Air Quality			X			X			
7. Unique, Endangered, Fragile or Limited Environmental Resources					X	X			
8. Demands on Environmental Resources of Water, Air, and Energy			X			X			
9. Historical and Archaeological Sites					X	X			

CUMULATIVE AND SECONDARY IMPACTS — The overall impact of the proposed transfer station is anticipated to be minor. The area proposed for the transfer station has been continuously farmed for over 100 years. Adequate safeguards exist in the design to prevent contamination of surface or ground water.

## **Potential Impacts on the Human Environment**

	LEVEL OF IMPACT								
RESOURCE	Major	Moderate	Minor	None	Unknown	Appendix			
1. Social Structure and Mores				X					
2. Cultural Uniqueness and Diversity				X					
3. Local and State Tax Base and Tax Revenue			X			X			
4. Agricultural or Industrial Production			X			X			
5. Human Health				X		X			
6. Access to and Quality of Recreational and Wilderness Activities				X					
7. Quantity and Distribution of Employment			X			X			
8. Distribution of Population				X					
9. Demands for Government Services			X			X			
10. Industrial and Commercial Activity			X			X			
11. Locally Adopted Environmental Plans and Goals			X			X			

CUMULATIVE AND SECONDARY IMPACTS — The construction and operation of the proposed transfer station in the proposed location is anticipated to have very minor impacts on the human environment. The increased employment that may be generated by the construction would have a minor but positive effect on the tax base of the county. The loss of agricultural production from not farming the area would be minor.

#### **APPENDIX**

# COMMENTS REGARDING THE POTENTIAL IMPACTS OF THE SOLID WASTE MANAGEMENT SYSTEM

#### I. POTENTIAL IMPACTS ON THE PHYSICAL ENVIRONMENT

## 1. Terrestrial and Aquatic Life and Habitats

Roadways, commercial/industrial areas and some cropland surround the proposed expansion site. The latest use of the land proposed for the transfer station has been farming. A site survey found that there are no surface waters, drainage channels or ponds on-the site. No wetland or hydrophytic vegetation was observed on the property or in the ditch. Based on the geotechnical test pits, none of the site's soils exhibit hydric characteristics. With no continuously active aquatic systems within the boundary of the proposed transfer station site, it is unlikely there is significant aquatic life or habitat on the site. Any impacts to aquatic life would likely be minor because it is an upland area.

Mule and white-tailed deer, coyote, fox, rabbits, rodents and various avian species may use the area. Because the area has been continuously farmed for over 100 years, loss of this acreage as wildlife habitat would not be considered critical. There is adequate acreage available in the vicinity to accommodate any terrestrial or avian species forced to relocate. Any terrestrial species inhabiting the area proposed for the transfer station would be displaced for the life of the facility. If the facility were to close, the area could be used for other commercial activity that could preclude use by wildlife. These impacts would be minor.

Proper operation of a transfer station minimizes scavenging by birds and mammals because the wastes are either inside the building or in covered trailers awaiting transport to the landfill.

Insects are seldom a problem at a properly operated transfer station. This facility's operation plan calls for regular cleaning of the tipping floor and trailer filling area. This would serve to minimize the opportunity for any vector problems.

## 2. <u>Geology and soil Quality, Stability and Moisture.</u>

## **Site Geology**

According to an environmental geology map for the Gallatin Valley, (Slagle, et al, 1995), Quaternary and Tertiary-aged alluvial fan deposits lie under the site. The deposits, which were derived from the Gallatin Range located south of Bozeman, primarily consist of a 100 to 200-foot thick layer of sandy gravel and cobbles interbedded with thin seams of sand, silt, and clay. Due to the historic fluvial and eolian activity in the valley, these sands and gravels are typically blanketed by 1.0 to 15.0 feet of silt and clay (i.e.

floodplain and windblown deposits), depending on the location. These fine-grained, near surface soils are usually capped by less than one-foot of topsoil. Consolidated beds of Tertiary-aged materials, which are generally considered to be "bedrock" for the area underlie the alluvial gravel formation. The shallow soil stratigraphy observed in the onsite explorations was consistent with this geological summary.

## **Site Characterization and Investigation**

The site topography can be separated into two distinct parts. The western one-third, a relatively flat area, gently slopes in a north/northeast direction at grades between 1.5 and 2.0 percent and ranges in elevation from 4680 to 4695 feet above sea level. The eastern two-thirds consists of a hillside that dips toward the west/northwest at grades between 3.0 and 8.0 percent and varies in elevation from 4685 to 4715 feet above sea level. A drainage swale runs in a northwesterly direction at the base of the hillside.

Eighteen test pits, ranging in depth from 7 to 14 feet below the ground surface, were used to analyze soil and groundwater conditions. Thirteen of the pits were sited around the property near the anticipated building locations (TP-1 through TP-13); while the other five were spaced along the proposed road location (TP-15 through TP-19). Of the 13 on-site pits, five were positioned in the flat area of the property and eight on the hillside. Two monitoring wells were installed on the west side of the site in the TP-1 and TP-5 locations. These wells, which consisted of a 10-foot length of perforated, four-inch PVC pipe wrapped in a non-woven filter fabric, were used for groundwater monitoring

Groundwater was encountered in only one test pit, TP-11, at a depth of 12.0 feet below the ground surface. This pit lies near the bottom of the hillside. The transfer building would sit over this location. Based on site topography and the presence of orange discolorations in the pits west of TP-11, it is anticipated that the flat area of the property experiences the shallowest groundwater depths. Seasonal high water potentially rises to within five to eight feet of the surface in this area. Monitoring measurements from the two on-site wells substantiate this assumption.

#### Site Soils

The project site, including the proposed access road location, is blanketed by about one-foot of black topsoil, which overlies a 1.5 to 12.0-foot thick layer of stiff to hard, brown, clayey silt to lean clay. Underlying the intermediate layer of silt/clay is the regional deposit of sandy gravel with abundant cobbles. Throughout the majority of the site, groundwater does not come within 10 feet of the surface. The only exception is in the low area on the western side of the site where seasonal high water likely rises to a depth of 5.5 to 7.0 feet below ground surface.

#### **Soil Impacts**

Construction and operation of the proposed facility should not result in excessive soil erosion or the substantial loss of topsoil. Topsoil could be salvaged during construction and used for the open grassy areas. Erosion would be minimized through paving and planting of grass.

## **Geologic Hazards and Constraints**

At this time, there is no universally accepted criterion for judging the susceptibility of a given soil to liquefaction. However, the soils most susceptible to liquefaction are loose, saturated, uniformly graded, sand and gravel deposits. In general, liquefaction typically occurs in these soils when dynamic loading (usually from earthquakes) temporarily creates excess pore water pressures and decreased effective stresses. In the most critical state, effective stresses become zero and the soil temporarily "liquefies" and loses all shear strength and is subject to "flowing". The sandy gravel that underlies the site is relatively well graded and generally medium dense to very dense. Given the gradation and density of the gravels, it appears they are not susceptible to liquefaction.

Any impacts to geology, soil quality, stability and moisture are anticipated to be minor.

## 3. Water Quality, Quantity and Distribution.

#### Climate

Bozeman's climate reflects its mountain valley location. Summers are pleasant, with warm days and cool nights. Hot weather and humid conditions are infrequent. The average high temperatures for summer are in the 70s and 80s and the average lows are in the mid 40s and low 50s.

Fluctuating temperatures characterize winters in Bozeman. Mild winter weather is not unusual and a week or more of consistently cold weather is rare. The average monthly high and low temperatures for December, January and February are 35 and 16, 31 and 11, and 37 and 17 respectively. One third of the annual precipitation of 18.61 inches falls during May and June. The average annual mean snowfall in Bozeman is 73.1 inches.

## **Site Hydrogeologic Characterization Investigation**

#### Supply Wells

There is one water well completed on the site. The well would be used for irrigation. The bulk of the water used on the site would come from the city water service to the site.

#### Regional Hydrogeology

The Gallatin Valley is part of a north-trending intermontane basin in southwestern Montana with a basin area of over 500 square miles. The Gallatin River and its tributaries drain the valley. Groundwater flow is generally to the northwest. Groundwater levels fluctuate seasonally and generally rise from spring through mid summer.

The facility site is located within the DNRC Bozeman Solvent Site Controlled Groundwater Area. One existing domestic well in the general area has tested positive for PCE, and municipal water has been provided to the area.

The Cherry Creek Fishing Access Site is located approximately one-quarter mile north of the transfer station site off of U.S. Highway 10. Cherry Creek is a tributary of the East Gallatin River. The Access Site covers approximately 76 acres and is maintained by the Montana Department of Fish Wildlife and Parks. Cherry Creek is a recreation area used for fishing, picnicking, and light hiking on the surrounding trails.

### Site Hydrogeology

Groundwater is generally over 10 feet deep and flows north to northwest. Two 10-foot deep ground water monitoring wells were installed to monitor groundwater beginning in the spring of 2004.

### **Ground Water Impacts**

Ground water impacts are expected to be minor. All storm water runoff would be routed to a storm water retention basin. The outlet for the basin would consist of infiltration chambers discharging to groundwater. All working areas of the site would be paved with asphalt or concrete pavement. Any accidental spills or leaks from equipment would be handled according to the appropriate environmental regulations to minimize any potential adverse impact on the immediate and surrounding area.

#### **Surface Water**

The site lies approximately 1,000 feet east of the nearest body of surface water, Mandeville Creek, a tributary of the East Gallatin River. There are no active or intermittent streams located on or adjacent to the proposed transfer station site. A site survey found no wetlands on the site and the area is not within the 100–year floodplain. The area generally drains to the southwest.

#### **Surface Water Impacts**

Surface water impacts are anticipated to be minor. A detention pond would capture all runoff and sediment from the site. This pond would have the capacity to contain stormwater from the post-development 25-year peak storm event. A discharge permit would probably not be necessary since all stormwater runoff from the active facility should be detained on site and the pond water would be allowed to infiltrate into the ground. Perimeter diversions would route surface water run-on from upgradient areas around the site to the natural drainage way.

The city would be required to apply to the Department to obtain permit coverage under the General Permit for Storm Water Discharges Associated with Construction Activity because the construction activity would result in the disturbance of an acre or more.

The Department is currently developing the General Permit for Storm Water Discharge Associated with Small Municipal Separate Storm Sewer Systems (MS4) to comply with the EPA Storm Water Phase II Final Rule. The City of Bozeman applied for coverage under the General Permit in March of 2003. The City is required to develop, implement, and enforce a Storm Water Management Program (SWMP) within five years of the authorization issued under the General Permit. The State has not issued the General Permit yet as it is currently being written and reviewed. While there are no specific design or BMP requirements at this time, the SWMP would define management practices, which would eliminate or minimize the discharge of pollutants to state waters. The current City design standards require storm water quantity and quality control (sediment only) measures for site development. The storm water management system for the facility would be designed to meet the current City design standards.

## 4. <u>Vegetation Cover, Quantity and Quality</u>

The transfer station site has been continuously farmed for over 100 years. There is very little native vegetation at the site. Any plant species at the site would be permanently displaced by the transfer station operations during the life of the facility. Since the area is near commercial and industrial areas, it is likely that if the transfer station were removed the area would be used for commercial or industrial activity and would not support plant growth. The overall impacts from the construction and operation of the facility would be minor.

#### 5. Aesthetics

#### Visual

The transfer station would be designed in accordance with the City of Bozeman <u>Design Objectives Plan for Entryway Corridors</u>. The structures would be architecturally compatible with the surrounding area, buildings and views. The site plan and building elevations would be reviewed by the city's Design Review Board to ensure the Guidelines of the Plan are met. Guidelines from the plan that would be applicable to this site include:

- Soften large expanses of asphalt with clusters of vegetation and reduce the visual impact of large parking areas.
- · Make pedestrian movement safer, more convenient and more appealing.
- Allow for the enjoyment of the outdoors during periods of good weather.
- Reduce glare and spillage of light to adjoining properties and streets and provide attractive site elements.
- Soften otherwise harsh, boxy building forms and produce rooflines that reflect the surrounding mountains and regional climate.
- Encourage varied building massing to break down the scale of large buildings and complexes.
- · Make building entrances clear and highly visible.
- Encourage coordinated development within multi-building complexes.
- · Screen rooftop mechanical equipment.
- Encourage buildings which incorporate specific character-giving features.

— Encourage signs to exhibit qualities of style, permanence and compatibility with the natural and built environment.

The Operation and Maintenance Plan would outline procedures to minimize the impact of the facility operation on aesthetics (such as limiting outdoor storage of recyclables, daily clean-up of waste within the transfer building, maintenance of building finishes, maintenance of site landscaping, maintenance of transfer vehicles, etc).

The proposed transfer station would likely have only minor impact on aesthetics

#### **Litter Control**

Litter would not be allowed to accumulate at or around the facility. Facility buildings, perimeter fence, parking areas, entrance gates, on-site roadways, recycling areas, and the main transportation routes to the facility, would be maintained in a litter-free condition by a litter crew that would routinely patrol the site and adjacent areas to retrieve litter. Any impacts from litter are expected to be minor.

## 6. <u>Air Quality</u>

The air quality impacts are expected to be minor. During construction there could be dust problems from the construction traffic and working equipment. If this became a problem, using dust palliative measures such as sprinkling roadways and work areas could control it.

During operation of the facility, vehicle traffic is not expected to generate dust from the site roadways, because all access roads would be paved. Vehicles would emit carbon monoxide and other air pollutants as combustion exhaust. The combustion exhaust is not expected to have any significant adverse impact on air quality.

Dust may be generated during the summer and early fall when long periods of low rainfall would cause the waste to be dry and dusty. Appropriately timed washing and sweeping of the tipping floor and roadways would control dust during the dry periods. In addition, unusually dusty loads would be sent directly to the landfill. The building ventilation system would be used to purge dust from the building and disperse it into the air. A water misting system could be installed in the building if needed for dust control.

Short-term storage of loaded trailers could generate odor that could be detected downwind of the facility. The worst odors would likely occur with warmer temperatures, longer residence time at the facility, and low wind conditions. Odor impacts would be greatest at the transfer trailer staging area, and decrease with increased distance from that source. Limiting the time waste is on site would minimize odors. In order to minimize the potential for odors, all transfer trailers would be removed from the facility on a first-in/first-out rotation. Barring emergencies, loaded trailers would not be kept at the facility for more than 24 hours. Especially odorous transfer trailers would be removed on a

priority basis. All transfer trailers would be cleaned and repaired as needed to assure that odor problems did not develop over time. In addition, the totally enclosed transfer station building would minimize the potential spread of odors. The tipping floor and transfer trailer loading areas would be swept daily, and washed and disinfected as needed to prevent the buildup of odors.

In the transfer building, a high pressure atomizing spray system applying an odor destruction agent may be added for odor control during, particularly odorous periods, if necessary.

## 7. Unique, Endangered, Fragile or Limited Environmental Resources

Impacts to plant and animal species, plant communities, and other biological resources that are rare, threatened, or limited would be minimal. The Montana Natural Heritage Program lists three species of concern that could be found in the vicinity of the site. The common names of the species are the Dwarf Purple Monkeyflower, Slender Wedgegrass, and the Stonefly. Species of concern are ranked on a scale of one to five on a global or range-wide status with one being critically imperiled and five being demonstrably secure. Dwarf Purple Monkeyflower and Slender Wedgegrass have a global rank of five meaning the species is demonstrably secure, though it may be rare in parts of its range. The Stonefly has a global rank of four meaning the species is apparently secure, though it may be rare in parts of its range. None of these species have been observed on the site. Because the property has been in agricultural production for over 100 years, it is undeterminable whether the species of concern exist at the site.

## 8. Demands on Environmental Resources of Water, Air and Energy

Energy demands related to waste disposal are primarily due to the hauling of waste to the disposal facility. Waste is now being hauled to the currently licensed landfill. If no new landfill were built, when the current facility reached capacity, waste would have to be hauled to the Logan Landfill. It is estimated that operation of the transfers station rather than having all waste hauled directly to Logan would save over 155,000 round trips per year. This could be a major savings in the amount of fuel used for waste disposal. Construction and operation of the proposed facility would cause a minor increase in fuel use.

## 9. Historical and Archaeological Sites

The State Historical Preservation Office (SHPO) was informed of the plans to construct a facility at this site. SHPO searched their records and found no documented historical or archaeological sites in the area proposed for the transfer station. This does not mean that there are no such sites at that location, but that there are no known sites there. Since there are known sites elsewhere in Gallatin County, the SHPO recommended that a cultural

resource survey be conducted prior to ground disturbance and that their office be contacted if any cultural materials are inadvertently discovered during construction or operation of the facility. The applicant had a cultural resource inventory conducted by Anthro Research, Incorporated. They determined that the transfer station location did not contain any prehistoric or historic cultural resource sites. If any buried cultural materials were discovered during construction, the SHPO would be contacted.

#### II. POTENTIAL IMPACTS ON HUMAN ENVIRONMENT

## 3. Local and State Tax Base and Tax Revenue

Because of the costs of construction of the proposed transfer station, there could be future increases in the cost of waste disposal to the taxpayers in Bozeman. Construction of the proposed facility could have a minor positive effect on the local tax base because of the additional jobs created during construction as well as the possible additional drivers needed to haul the trailers to the Logan Landfill.

## 4. <u>Agricultural and Industrial Production</u>

Impacts to agricultural and industrial production are expected to be minimal. The area proposed for the transfer station is currently used for agricultural production raising hay and grain. Operation of the facility would have a minor effect on agricultural production by eliminating the possibility of the area being used for agricultural activities. For example, in the surrounding area there are approximately 280 acres of winter wheat. The construction of the facility would take seven acres of a winter wheat crop out of production resulting in a 2.5% loss compared to the surrounding area. The area has been zoned for commercial use for over 21 years. The construction and operation of a transfer station would fit with the proposed future use of the area. Unless the zoning changes, it is unlikely the area would go back to agricultural use.

## 5. Human Health

It is anticipated that there would be no impacts to human health. The impacts to human health from a solid waste facility generally are associated with the birds, animals and insects that could serve as disease vectors. The dumping and handling of waste would be within the building so it would not be accessible to birds and rodents. Proper cleaning and washing down of the areas that come into contact with waste and not allowing waste to accumulate on the site should eliminate the opportunity for flies or other insects to become a problem.

## 7. Quantity and distribution of employment

The impact to the quantity and distribution of employment is expected to be minimal. After the Story Mill Road Landfill closes the city anticipates that the landfill employees would be transferred to the proposed transfer station, resulting in no net loss of jobs. There is a possibility additional jobs would be created for drivers to haul waste from the transfer station to the Logan Landfill. If drivers were not hired by the city, the positions would be contracted out, creating jobs in the community for private businesses. There would be a temporary increase in the number of jobs available during the construction of the facility, access road and other roadway improvements.

## 9. Demands for Governmental Services

The potential impact of the proposed facility would be minor. Department personnel must spend time reviewing the proposal and licensing the transfer station. The Department would perform inspections of the site during and after construction in addition to continuing regular inspections. During the construction phase, there would be increased traffic on roads leading to the site, but the impact is expected to be minor. The water and sanitary sewer utilities already exist and were designed/constructed with development of the site in mind.

The city wastewater treatment plant would have to treat the water entering the system from the site. Those areas in the transfer building regularly in contact with solid waste would have a dedicated wastewater system of sumps and floor drains discharging into a buried, double walled sampling vault with a valve on the downstream end of the vault. The sampling vault would be designed to hold a minimum of two days of wastewater flow. After the water entered the sampling vault it would be tested to determine whether the Bozeman wastewater treatment plant would accept it. If the water were acceptable to the treatment plant, the valve would be opened to discharge into the city sewer system. If the wastewater were not acceptable, it would be pumped by a private septic hauler and properly disposed of. Wastewater flow from other on-site buildings (i.e. bathrooms, sinks) would flow into a separate service line connected directly into the city sewer system.

## 10. <u>Industrial and Commercial Activity</u>

Construction of the proposed facility would cause a minor increase in the industrial activity of the area during construction. The site has been zoned industrial for at least 21 years. Operation of a transfer station would be in keeping with that zoning. If the facility is constructed and is removed in the future, other industrial activities could occur. The Transfer Station would provide a legal and environmentally sound waste disposal option for industrial and commercial establishments in Bozeman. Development of this site could also open surrounding land for development, as anticipated in the Bozeman Area 2020 Plan. Any additional development would have a positive effect on the tax base.

Therefore, the facility could have a positive impact on the industrial and commercial activity in the area.

Impact to areas streets and roads is expected to be minimal. Transfer station traffic would be made up of customer vehicles, transfer truck vehicles, and visitor vehicles. Customer vehicles would be passenger vehicles such as sedans or mini vans and pick-up trucks. Commercial vehicles would be heavier flatbed pick-ups, and collection vehicles would be single or double axle route collection trucks carrying up to 9 tons of residential/commercial waste. Transfer truck vehicles would be interstate tractors with semi trailers up to 76 feet in length and 80,000 to 105,500 pound gross vehicle weight. Visitor vehicles would include passenger vehicles, tour busses, school busses, and small trucks.

The roads affected by the transfer station would include Highway 10, North Seventh Avenue, and Mandeville Lane/W. Griffin Drive with the bulk of the traffic coming from the south on North Seventh Avenue. The 2006 average daily traffic to the transfer station is expected to be 178 vehicles. The maximum number of vehicles in an hour is expected to be 44 (These figures are based on the numbers of vehicles going to the current landfill.) This would amount to a 1.2 percent increase in traffic on North Seventh Avenue. Assuming that the general traffic on North Seventh Avenue and the traffic to the transfer station would grow at approximately the same rate, the overall impact to traffic on North Seventh Avenue would remain the same for the life of the facility.

## 11. <u>Locally Adopted Environmental Plans and Goals</u>

The use of the property as proposed is in accordance with local government zoning. The facility would comply with plans and goals listed in the Bozeman 2020 Community Plan. The Environmental Quality and Critical Lands Goals, Objectives, and Implementation Policies are listed in section 8.14 of the 2020 Plan. The transfer station facility would adhere to the following goals and objectives of the 2020 Plan and addresses each as follows:

8.14.1 – Protect the health, safety, and welfare of Bozeman area residents, and protect private and public property.

*Objective 1.* Discourage development in areas characterized by wetlands, hydric soils, floodplain and flooding, high water table, seismic activity, steep slopes, faults, landslide hazard, and fire-dependent natural areas.

- —The facility would not be located in areas with the features listed in objective 1.
- 8.14.2 Identify, protect, and enhance resources within the planning area, and the important ecological functions these resources provide.

Objective 1. Retain and enhance the benefits wetlands provide such as groundwater and stream recharge, fish and wildlife habitat, flood control, sediment control, erosion control, and water quality.

—The location survey found no wetlands in the area proposed for the transfer station.

- Objective 2. Maintain and enhance floodplain capacity for conveying and storing floodwaters.
- —The facility would not be located within the floodplain.
- *Objective 3.* Protect riparian corridors to provide wildlife habitat and movement areas, and to buffer water bodies.
- —The facility would not be located within any riparian areas or corridors.
- Objective 4. Develop and implement a citywide noxious weed control plan.
- —A weed control plan would be developed for the site according to the Gallatin County Weed District requirements.
- 8.14.3 Ensure good environmental quality of water resources, air, and soils within the planning area.
- Objective 1. Protect, restore, and enhance wetlands in the planning area.
- —The location survey found no wetlands in the area proposed for the transfer station.
- *Objective 2.* Protect, restore, and enhance riparian corridors to protect the chemical, biological, and physical quality of water resources.
- —The facility would not be located within any riparian areas or corridors.
- *Objective 3.* Ensure that land uses in areas characterized by a high water table and/or aquifer recharge zone would not contaminate water resources.
- —The site is not located within a high water table or recharge zone. No ground water quality problems would be expected as a result of operating the facility.
- Objective 4. Ensure that future development will not contaminate soils and water, and encourage the cleanup and redevelopment of existing Brownfields to return these lands to productive use.
- Soils and watercourses would be protected through appropriate wastewater and stormwater control. Erosion would be controlled with paving and landscaping. Storm water management as outlined in the O&M plan would protect and eliminate contamination of nearby water sources. Run-off from the site would be contained in the sedimentation pond. Wastewater would be collected and discharged to the municipal sanitary sewer system. On-site testing would be conducted to determine if the wastewater is acceptable for discharge to the city sewer system. There are no Brownfields in the area proposed for the transfer station.
- Objective 5. Protect and enhance air quality in order to minimize health hazards associated with air pollution.
- —All working areas of the site as well as the road leading to the site would be paved with asphalt or concrete pavement to reduce dust generation. Odors would be controlled by rapid removal of the full trailers and implementation of a spray odor control system if odors became a problem.
- 8.14.4 Maintain a natural and attractive aesthetic character for the Bozeman Area.
- Objective 1. Protect viewsheds and ridgelines by carefully planning development location, type and character.
- —The transfer station building would be set at the lowest part of the site and would use berms and landscaping to maintain the existing aesthetic character. The structures would reflect the architectural character of the surrounding area. Design of accessory buildings would create a unified complex of compatible buildings that are sensitive to each other

and the surrounding area. Because the transfer building would be very large, the surrounding buildings would assist in avoiding the appearance of a single large-scale utilitarian building on the landscape. The existing elevated railroad and highway overpass adjacent to the site would assist in providing a barrier between the transfer station and neighboring property

Objective 2. Ensure a dark evening sky, public safety, and energy efficiency by addressing the issue of light pollution.

—The transfer station would use cut off site lighting to prevent light spill to adjacent properties and use non-reflective siding and roofing materials.

*Objective 3.* Work with utility providers to eliminate overhead service lines over the next twenty years.

—No overhead service lines would be added at the site.

Objective 4. Control ambient and site-specific noise conditions and impacts.

—To mitigate noise impacts, there would be mufflers on all heavy equipment, a height limit would be established for objects dropped from the elevated self-haul unloading area, and waste-handling operations would be within the transfer station building.

## References

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